ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
Haughian Bass Reservoir spillway repair

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP tentatively plans to provide partial funding toward the replacement of an ice-damaged spillway pipe, trash rack, and concrete pad at Haughian's Bass Reservoir.

I. Location of Project:

This project will be conducted on Haughian Bass Reservoir, a 133 acre impoundment of Physic Creek north of Miles City in Custer County. The overall goal is to secure the spillway and ensure adequate water storage to reduce the fish kills in winter months. It is located within Township 12N, Range 48E, Sections 4 in Custer County (Figure 1).

II. Need for the Project:

One goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "restore and enhance degraded fisheries habitats." By implementing an improvement project and restoring important habitat, this proposed project would help meet this goal. A damaged spillway pipe, trash rack, and concrete pad at Haughian Bass Reservoir has threatened the spillway and water depth for a popular fishery in Region 7 (Figures 2 and 3). Making the improvements would restore storage capacity and reduce the risk of a fish kill during winter months. Ensuring proper water depth will enhance habitat for all fish species present.

III. Scope of the Project:

The project proposes to replace an ice-damaged spillway pipe, trash rack, and concrete pad at Haughian's Bass Reservoir, as well as fill a head cut and regrade the dam barrow area to improve water drainage. The overall goal is to improve the integrity of the dam and ensure proper storage and water depth for fish. This project is expected to cost $4583.20. Of this total, the FFIP would be contributing up to $4,100 to complete the project.

Contributor	In-kind services	In-kind cash
Landowner	$120.00	
FWP	$363.20	
Total: $483.20		

IV. Environmental Impact Review Checklist:

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment

Project Title: Haughian Bass Reservoir spillway repair
Division/Bureau: Fisheries Division / Fish Management Bureau (FFIP)
Description of Project: The Program tentatively plans to provide partial funding toward the replacement of an ice-damaged spillway pipe, trash rack, and concrete pad at Haughian's Bass Reservoir, which is a 133 acre impoundment of Physic Creek north of Miles City in Custer County.

A. POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Geology and soil quality, stability and moisture			X			X
2. Air quality or objectionable odors			X			X
3. Water quality, quantity and distribution (surface or groundwater)			X			
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality				X		
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X			X
8. Unique, endangered, or fragile wildlife or fisheries species				X		
9. Introduction of new species into an area				X		
10. Changes to abundance or movement of species			X			X

B. POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Noise and/or electrical effects			X			X
2. Land use				X		
3. Risk and/or health hazards				X		
4. Community impact				X		
5. Public services/taxes/utilities				X		
6. Potential revenue and/or project maintenance costs				X		
7. Aesthetics and recreation			X			X
8. Cultural and historic resources				X		
9. Evaluation of significance				X		
10. Generate public controversy				X		

V. Explanation of Impacts to the Physical Environment

1. Geology and soil quality, stability and moisture

   This project intends to repair a headcut and improve drainage. The impacts are considered to be positive long-term.

2. Air quality or objectionable odors

   There may be temporary odors from the use of heavy equipment, but the impact will be minor and temporary.

7. Terrestrial or aquatic life and/or habitats

   Repair of the spillway and headcut will improve the stability of the dam and result in increased water storage. Improved water depth in winter months will be beneficial for aquatic life.

10. Changes to abundance or movement of species

    Improved water storage is expected to increase abundance of fish species and reduce the likelihood of a winter fish kill.

VI. Explanation of Impacts to the Human Environment

1. Noise and electrical effects

The use of heavy equipment is likely to cause temporary noise, but the impact is considered short-term and minimal.

7. Aesthetics and recreation

The improvements are expected to maintain or improve recreation at Haughian Bass Reservoir, a popular fishery in Region 7.

VII. Narrative Evaluation and Comment.

There are no anticipated cumulative effects.

VIII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative.

If no funding is provided through the FFIP, either the applicant would have to seek additional sources of funding to complete the project, or the affected area of Haughian Bass Reservoir would remain compromised and likely fail in the future.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to restore the spillway and repair a headcut at Haughian Bass Reservoir.

IX. Environmental Assessment Conclusion Section.

1. Other groups or agencies contacted or which may have overlapping jurisdiction:

Army Corps of Engineers
Department of Environmental Quality
Custer County Conservation District

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

None.

3. Is an EIS required?

No. We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

4. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP. The proposed project also will be reviewed by the Fish & Wildlife Commission, and funding will be contingent upon their approval. The EA will be distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: **www.fwp.mt.gov**.

5. Duration of comment period?

Public comment will be accepted through 11:59 PM, July 30, 2019.

6. Person(s) responsible for preparing the EA.

Michelle McGree, Program Officer
Montana Fish, Wildlife & Parks
1420 East 6th Avenue, P.O. Box 200701
Helena, MT 59620
Telephone: (406) 444-2432, E-mail: mmcgree@mt.gov
Contributor: Mike Bakes

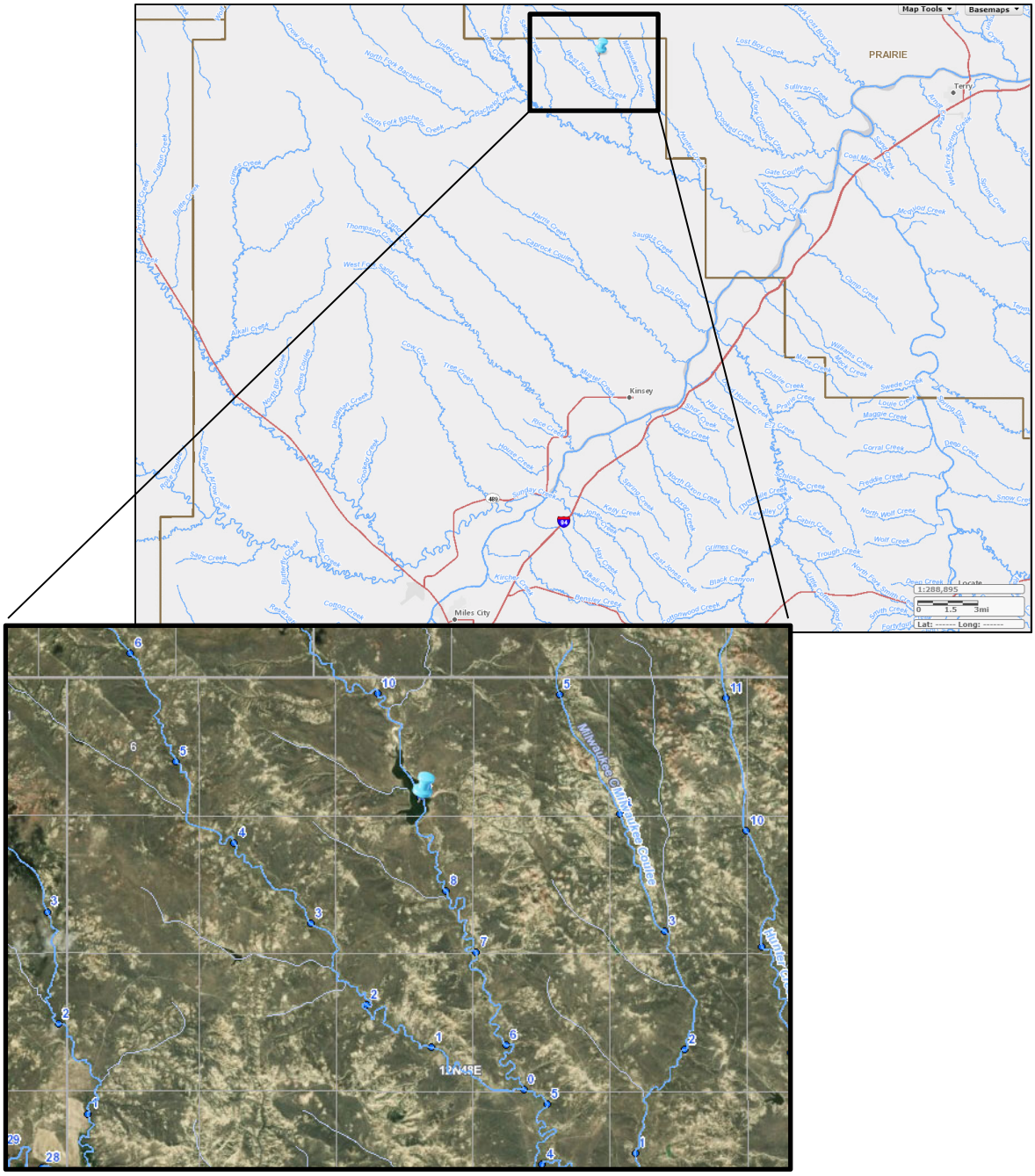

FIGURE 1: project location
Miles city located in bottom left/center of top map.

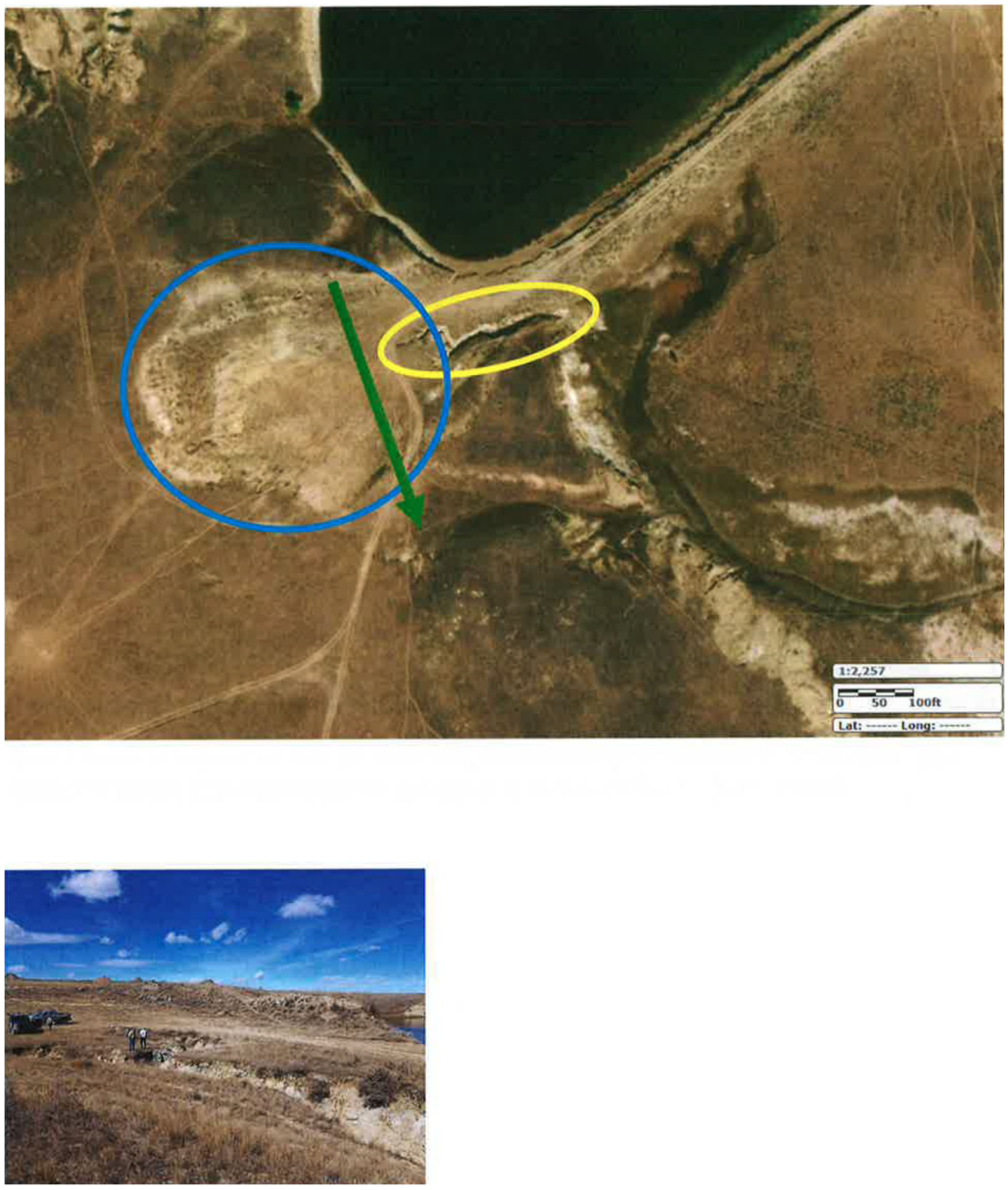

FIGURE 2: Existing conditions.
Top photo shows a head cut adjacent to dam (yellow circle), borrow area that is the source of runoff water (blue circle), and the potential dike location to reroute runoff (green arrow). Bottom photo shows a the headcut.

(A)

FIGURE 3: Existing spillway pipe.
(A) Closeup of damaged spillway pipe; (B) overall view looking northeast; (C) Short-term fix with sandbags to reduce water loss.